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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/740,988	12/21/2000	Hiroshi Arita	· · · · · · · · · · · · · · · · · · ·	5452	
24956 759	90 10/23/2003		EXAMINER		
MATTINGLY, STANGER & MALUR, P.C.			COSIMANO, EDWARD R		
1800 DIAGONA SUITE 370	AL KOAD		ART UNIT	PAPER NUMBER	
ALEXANDŔĨA	ALEXANDŘIA, VA 22314				
			DATE MAILED: 10/23/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application	No.	Applicant(s)	$\supset M$				
,	09/740,988		ARITA ET AL.					
Office Action Summary	Examiner		Art Unit					
	Edward R. Co		3629					
The MAILING DATE of this communication appears on the cover sheet with the corresp ndence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status								
1)⊠ Responsive to communication(s) filed on 21 L	December 200	<u> 20</u> .						
·								
3) Since this application is in condition for allows				ne merits is				
closed in accordance with the practice under <b>Disposition of Claims</b>	Ex parte Qua	<i>yl</i> e, 1935 C.D. 11, 4	153 O.G. 213.					
4)⊠ Claim(s) <u>19-31</u> is/are pending in the application.								
4a) Of the above claim(s) <u>none</u> is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.								
6)⊠ Claim(s) <u>19-31</u> is/are rejected.								
7) Claim(s) is/are objected to.								
8) Claim(s) are subject to restriction and/or election requirement.								
Application Papers								
9) The specification is objected to by the Examiner.								
10)⊠ The drawing(s) filed on <u>21 December 2000</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11) The proposed drawing correction filed on <u>21 December 2000</u> is: a) approved b) disapproved by the Examiner								
If approved, corrected drawings are required in reply to this Office action.  12) The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120								
13) △ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a)⊠ All b)□ Some * c)□ None of:	· priority ariao		i) (d) 5i (i).					
1. Certified copies of the priority document	s have been r	eceived.						
2. ☐ Certified copies of the priority documents have been received in Application No. <u>09/290,170</u> .								
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.								
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).								
a) ☐ The translation of the foreign language provisional application has been received. 15)☑ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.								
Attachment(s)	grisiny driot	2. 22 2.0.0. 33 120	GIGOT IEI,					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3</li> </ol>	5)		/ (PTO-413) Paper No Patent Application (PT					

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1. Applicant should note the changes to patent practice and procedure:

A) effective December 01, 1997 as published in the <u>Federal Register</u>, Vol 62, No. 197, Friday October 10, 1997;

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- B) effective November 07, 2000 as published in the <u>Federal Register</u>, Vol 65, No. 54603, September 08, 2000; and
- C) Amendment in revised format, Vol. 1267 of the Official Gazette published February 25, 2003.
- 2. The drawings are objected to because
  - A) the following errors have been noted in the drawings:
  - (1) The drawings are objected to as failing to comply with 37 CFR § 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:
    - (a) as can be seen in fig. 1, this figure lacks reference number 8 as described in the paragraph between page 10, line 28, and page 11, line 3, "The interconnection line 3 ... lines 6, 7, 8 respectively ... to these respective countries."; and
    - (b) as can be seen in fig. 10, this figure lacks reference numbers 101 & 102 as described in the paragraph between page 31, line 23, and page 32, line 23, "Furthermore, the alternating current systems 101, 102 are ... information transmission method becomes available.".
  - (2) The drawings are objected to as failing to comply with 37 CFR § 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: see below in section (3)(B)(1).
- 2.1 A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- 2.2 Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the

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examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

3. The disclosure is objected to because of the following informalities:

## A) applicant must update:

(1) the continuing data on page 1,

with the current status of each of the referenced applications, e.g., --now abandoned--, or --now patent #?--, or --which is abandoned and now serial number #?--, etc.

B) as required by 37 CFR § 1.84(p(5)) and 37 CFR § 1.121(e) the specification lacks an explicit reference to the nature of:

## (1) reference legend(s):

- (a) the reference numbers added to fig. 5 as required below to the description of this figure in the paragraph between page 18, line 22, and page 19, line 24, "Fig. 5 is a flow chart ... interchange in a free market style.";
- (b) 109 of fig. 10 as this figure is described in the paragraph between page 31, line 23, and page 32, line 23, "Furthermore, the alternating current systems 101, 102 are ... information transmission method becomes available.";
- (c) 12a, 12b, 12d, 12e, 124 & 125 of fig. 12 as this figure is described in the paragraph between page 33, line 30, and page 35, line 9, "Fig. 12 is a view ... meets the preliminarily concluded contract.";
- (d) 151 & 152 of fig. 15 as this figure is described in the paragraph at page 37, lines 4-26, "Fig. 15 is a view ... mounted on respective information paths."; and
- (e) 151 & 152 of fig. 16 as this figure is described in the paragraph between page 37, line 27, and page 38, line 16, "Furthermore, Fig. 16 is a view ... values of delay timers 154, 155 of Fig. 15.".

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In this regard, it is noted that merely mentioning either a feature or a number with out mentioning the device or operation or number or feature relies on the drawing to provide support for the disclosure and not to aid in the understanding of the invention, as is the purpose of the drawings (37 CFR § 1.81(a,b)).

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- C) the following errors have been noted in the specification:
- (1) the description of fig. 5 lacks reference numbers to aid in the correlation of the description of this figure to what is depicted in fig. 5, note the paragraph between page 18, line 22, and page 19, line 24, "Fig. 5 is a flow chart ... interchange in a free market style.".

Appropriate correction is required.

- 4. The specification and drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification or drawings. Applicant should note the requirements of 37 CFR § 1.74, § 1.75, § 1.84(o,p(5)), § 1.121(a)-1.121(f) & § 1.121(h)-1.121(i).
- 5. Claims 19-31 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- In regard to claim 19, a method of settling the exchange of power between two different countries is set forth, where one of the two countries supplies a portion of the power demand for the other country and the settlement is in terms of something called "environmental value". However, since for example:
  - A) each country would have it's own regulations concerning the release of pollution, note the EPA in the United States;
  - B) each country may have international disputes over pollution crossing the border from one of the countries into the other country, note the disagreement between Canada and the United States over this matter;

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C) such a method of settlement would require an international treaty that addresses how the environment concerns are to be handled by each of the parties to the treaty; and

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D) it is unclear form the claims what is to be considered as "environment value";

It is unclear, vague and indefinite how one of ordinary skill could implement the claimed invention is regard to determining what is "environment value" and how such an settlement would be implanted by the participating countries.

- 5.2 Claims 19-31 are inoperative and therefore lack utility for the recited purpose of the disclosed and claimed invention, since:
  - A) for the reason set forth above in points (A)-(D) above in section 5.1, one of ordinary skill could not implement a usable version of the claimed invention.

For as the Court has specifically pointed out, claims must recite utility for the disclosed purpose of the invention, (General Electric Co. V. U.S., 198 U.S.P.Q. 65 (U.S. Court of Claims, 1978), Hanson v. Alpine Valley Ski Area 204 U.S.P.Q. 794 (District Court, E. D. Michigan, N. Div. 1978) and Banning v. Southwestern Bell Telephone C., 182 U.S.P.Q. 683 (SD Tex, 1974)).

- 5.3 Claims not specifically mentioned above, inherit the defects of the base claim through dependency. For the above reason(s), applicant has failed to particularly point out what is regarded as the invention.
- 6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6.1 Claims 23, 27 & 28 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by the Transmission & Distribution World article (date February 2001) as applied in view of <u>In</u> re Epstein 31 USPQ2d 1817 (CAFC 1994).

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6.1.1 In regard to claims 23, 27 & 28, the Transmission & Distribution World article, discloses that in 1995 the South African Power Pool coordinates the cooperation between multiple international countries in the exchange of power in order to meet the power demands of each country as well as the settlement of the power exchanges. It is noted that each country would have it's own law/regulations.

- 7. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
  - (c) Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.
- 7.1 Claims 24-26 & 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Transmission & Distribution World article (date February 2001) as applied in view of In re Epstein 31 USPQ2d 1817 (CAFC 1994) in view of Cohn (3,701,891).
- 7.1.1 In regard to claim 24, 31, the Transmission & Distribution World article does not disclose the use of interconnection adjustment equipment, however, Cohn ('891) in the environment of energy transfer discloses that the interchange of power between two areas is accomplished by scheduling a balanced transfer of energy. Since the interchange of power between two areas is required to be scheduled and balanced, it would have been obvious tone of ordinary skill at the time the invention was made that there must be some type of control/administration equipment to perform and control the transfer of energy between two

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areas in the power exchange system disclosed in the Transmission & Distribution World article.

- 7.1.2 In regard to claim 25, it is noted that various countries have different currencies that may have different exchange rates.
- 7.1.3 In regard to claim 26, it is noted that the Transmission & Distribution World article discloses that the SAPP includes hydro-electric plants and that the SAPP can be operated to optimize operation/production costs.
- 8. The following is an Examiner's Statement of Reasons for Allowance over the prior art:
  - A) the prior art, for example:
  - (1) Cohn (3,701,891) which discloses that the interchange of power between two areas is accomplished by scheduling a balanced transfer of energy.
  - (2) Johnson et al (6,047,274) which discloses the practice of trading energy between suppliers and end users as well as the settlement of such a trade.
  - (3) the Transmission & Distribution World article, which discloses that in 1995 the South African Power Pool coordinates the cooperation between multiple international countries in the exchange or power.
  - B) however in regard to claim 19, the prior art does not teach or suggest the settlement of a power exchange using environmental value. Claims 20-22 are allowable over the prior art for the same reason.
  - C) however in regard to claim 29, the prior art does not teach or suggest the exchange of power using AC to DC converters controlled remotely over a communication slink using delay timers. Claim 30 is allowable over the prior art for the same reason.
- 9. Applicant must supply the prior art mentioned in the paragraph:
  - A) between page 2, line 21, and page 3, line 4, "As a plan, CIGRE Keynote Address (Paris, August 28, 1994) ... difficult has become apparent.";
- 10. The examiner has cited prior art of interest, for example:
  - A) the Electric Utility Week article which discloses that the FERC regulates the transfer of power between various states.

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B) Johnson et al (6,047,274) which discloses the practice of trading energy between suppliers and end users as well as the settlement of such a trade.

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C) Lof et al (2002/0084655) which discloses various aspects of a power storage and distribution grid.

11. Claim 19 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. § 112. Claims 20-22, 29 & 30 would be allowable if rewritten to overcome the rejection under 35 U.S.C. § 112 and to include all of the limitations of the base claim and any intervening claims. As allowable subject matter has been indicated, applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 C.F.R. § 1.111(b) and section 707.07(a) of the M.P.E.P.

12. The shorten statutory period of response is set to expire 3 (three) months from the mailing date of this Office action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Cosimano whose telephone number is (703) 305-9783. The examiner can normally be reached Monday through Thursday from 7:30am to 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss, can be reached on (703)-308-2702. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

13.1 The fax phone number for **UNOFFICIAL/DRAFT FAXES** is (703) 746-7240.

13.2 The fax phone number for **OFFICIAL FAXES** is (703) 872-9306.

13.3 The fax phone number for AFTER FINAL FAXES is (703) 872-9306.

10/20/03

Edward R. Cosimano Primary Examiner A.U. 3629